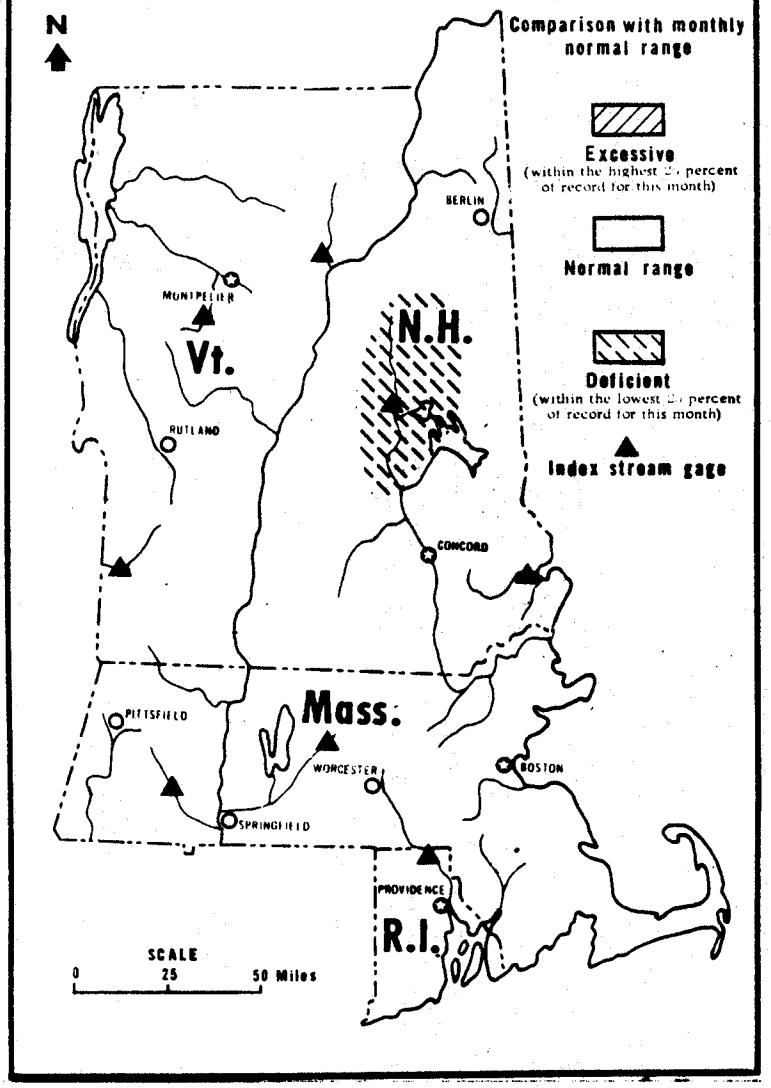
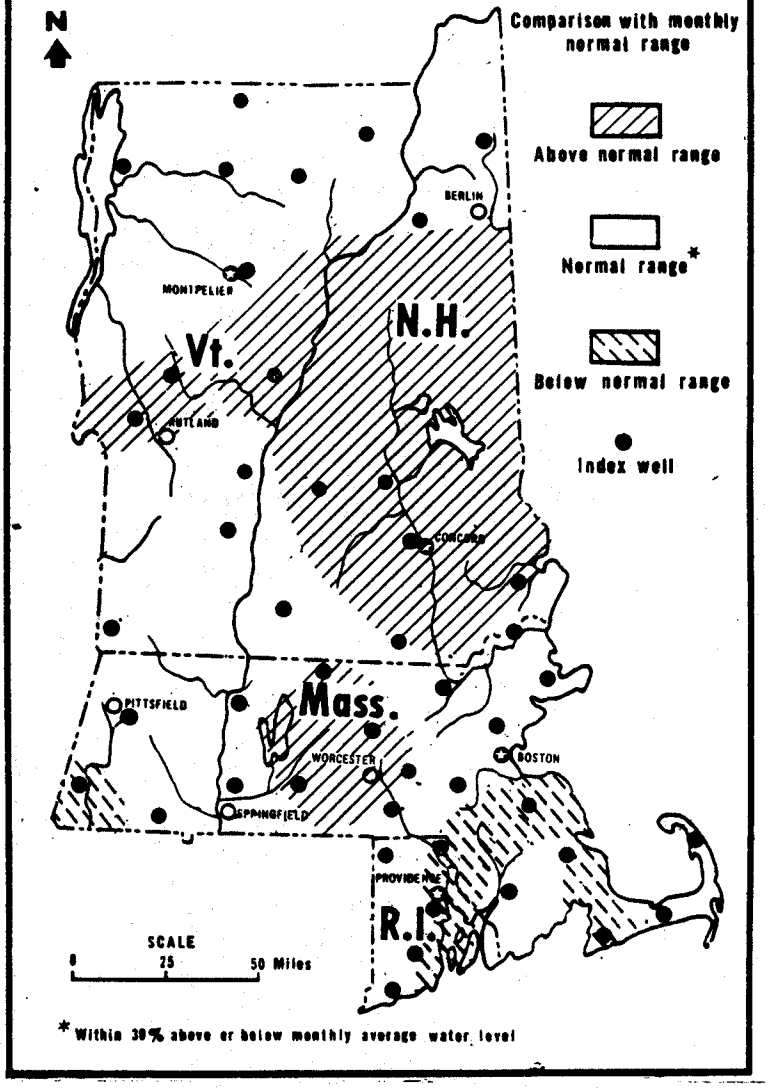
CURRENT WATER RESOURCES CONDITIONS IN CENTRAL NEW ENGLAND

WATER RESOURCES DIVISION, U.S. GEOLOGICAL SURVEY
IN COOPERATION WITH THE STATES OF
MASSACHUSETTS, NEW HAMPSHIRE, RHODE ISLAND, AND VERMONT

SURFACE-WATER RUNOFF
DECEMBER 1981



GROUND-WATER LEVELS
DECEMBER 1981

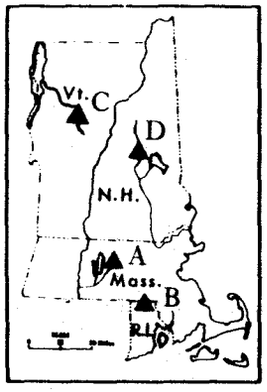


Runoff during December was in the normal range throughout central New England except for a small area in central New Hampshire, which was slightly deficient. Runoff was almost in the deficient range in southwestern Massachusetts and almost in the excessive range in coastal New Hampshire. With normal precipitation during January, runoff is expected to be normal throughout central New England.

Ground-water levels during December remained below normal on Cape Cod and were in the normal or above normal ranges elsewhere. If present trends continue, water levels near the end of January are expected to be in the normal or above normal range everywhere, including Cape Cod.

Storage in major reservoirs declined in New Hampshire and Vermont and increased in Massachusetts and Rhode Island and ranged from about 86 to 124 percent of average for the end of December. Scituate Reservoir in Rhode Island increased from 56 percent full at the end of November to 69 percent full near the end of December, indicating welcome relief from low water supplies in much of that State.

STREAMFLOW AT SELECTED INDEX GAGES

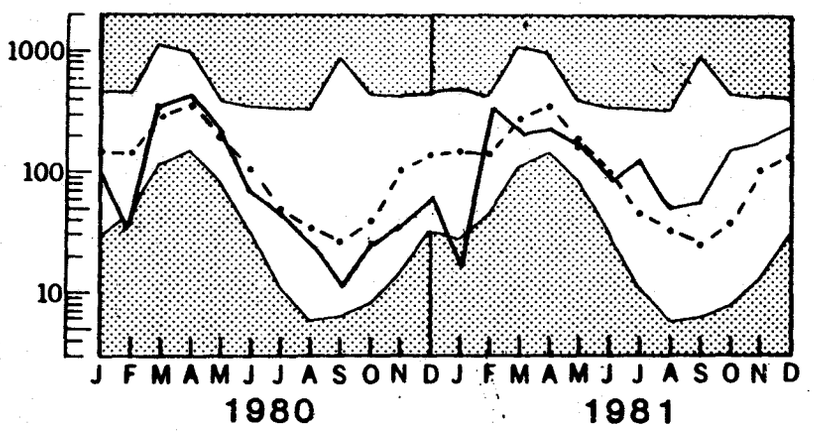


UNSHADED AREA SHOWS RANGE
BETWEEN HIGHEST AND LOWEST
MONTHLY MEAN DISCHARGES OF RECORD

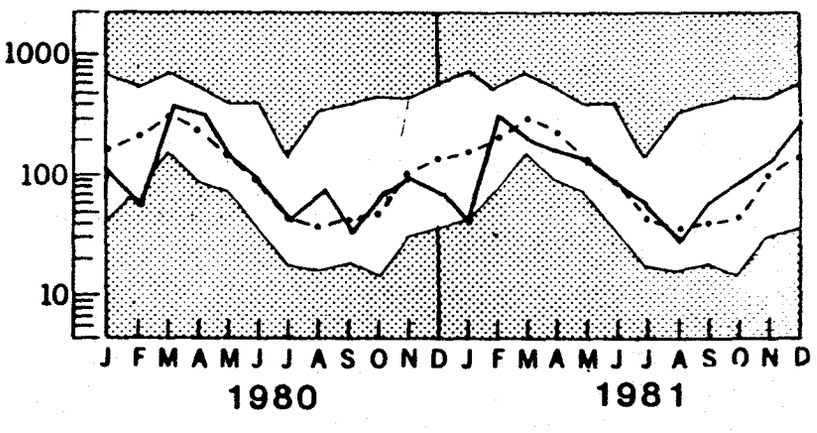
CURRENT RECORD ——— MEDIAN -·-·-·-·-

MONTHLY MEAN DISCHARGE, IN CUBIC FEET PER SECOND

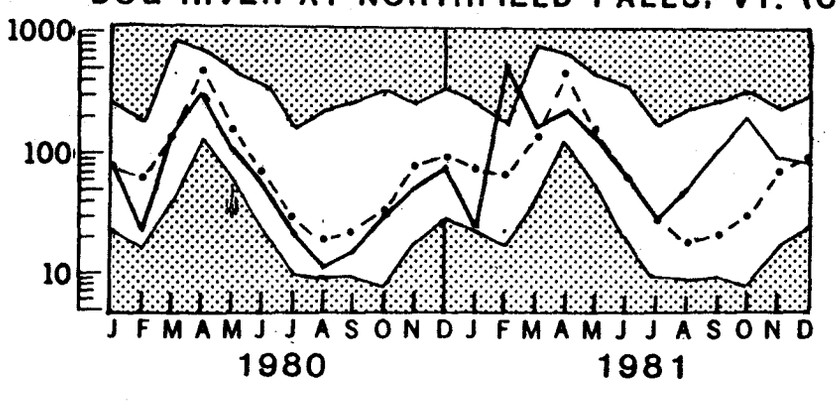
WARE RIVER AT INTAKE WORKS NEAR BARRE, MA (A)



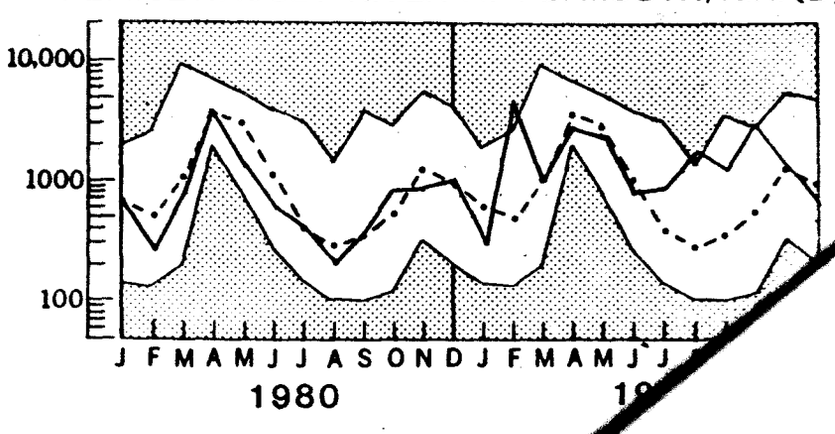
BRANCH RIVER AT FORESTDALE, R.I. (B)



DOG RIVER AT NORTHFIELD FALLS, VT. (C)



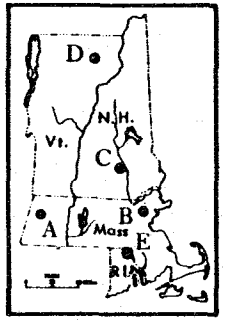
PEMIGEWASSET RIVER AT PLYMOUTH, N.H. (D)

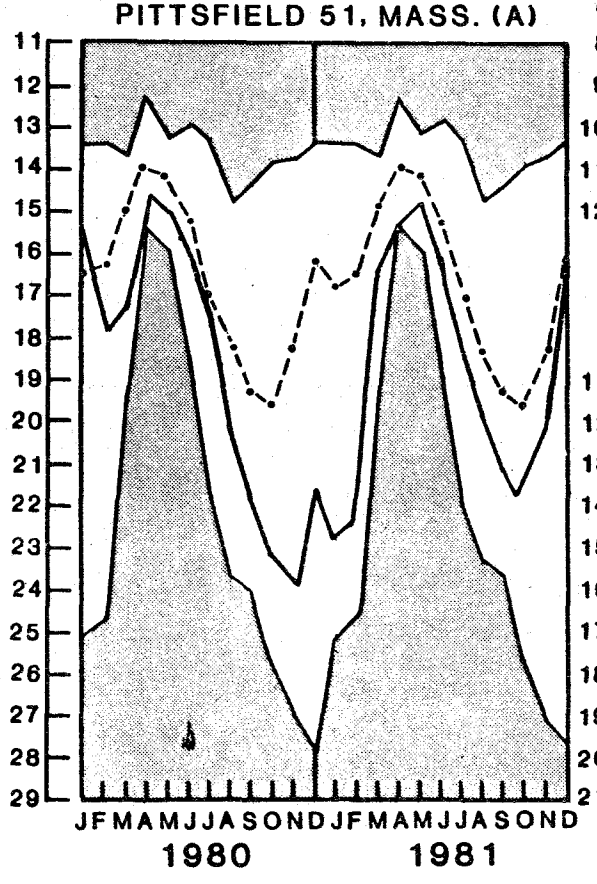


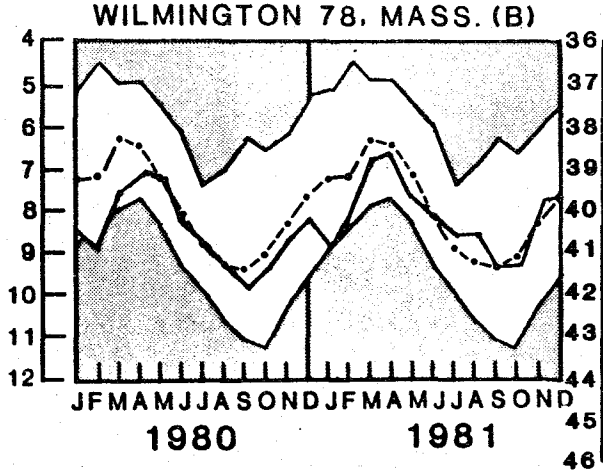
GROUND-WATER LEVELS IN SELECTED OBSERVATION WELLS

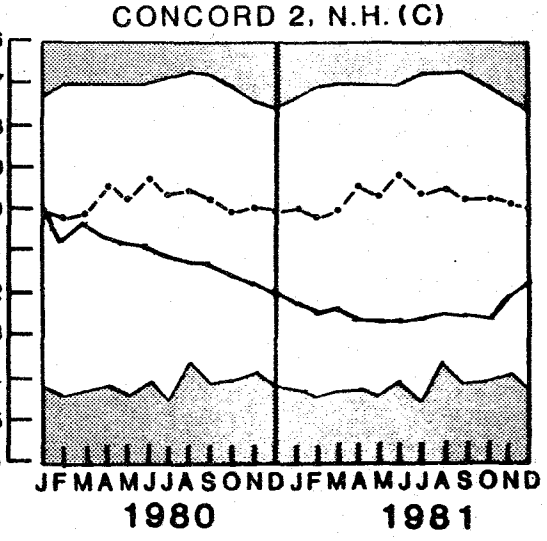
UNSHADED AREA SHOWS RANGE BETWEEN HIGHEST AND LOWEST
MONTH-END WATER LEVEL OF RECORD

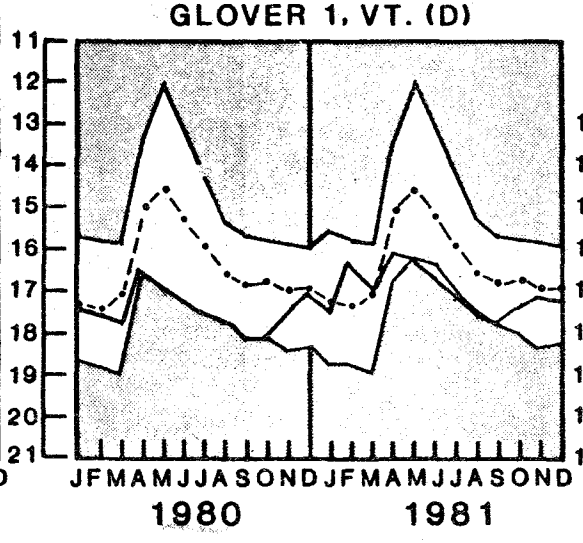
CURRENT RECORD ——— AVERAGE —·—·—

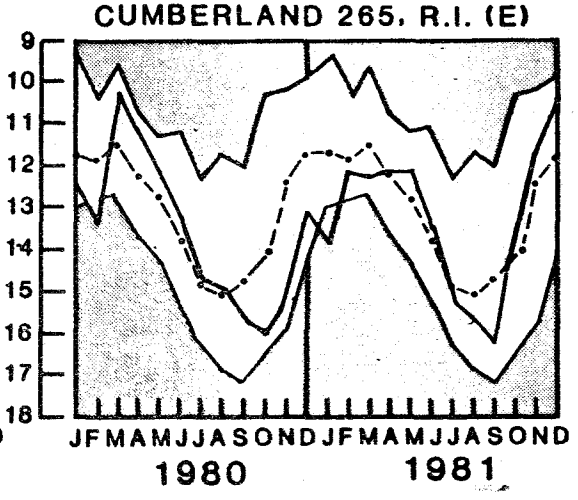












SUMMARY OF GROUND-WATER LEVELS, DECEMBER 1981 — PROVISIONAL **********

WELL	START OF RECORD	NET CHANGE IN MONTH (FEET)	NET CHANGE IN ONE YEAR (FEET)	DEPARTURE FROM DECEMBER AVERAGE* (FEET)	WATER LEVEL BELOW LAND-SURFACE DATUM (FEET)
MASSACHUSETTS					
ACTON 158	1965	+ 0.96	+ 1.11	- 0.04	19.48
BARNSTABLE 230	1957	+ 1.41	+ 0.60	- 0.62	24.69
BARNSTABLE 247	1962	+ 0.55	+ 0.01	- 1.27	26.52
BOURNE 198	1962	+ 0.82	+ 0.17	- 0.31	34.36
BREWSTER 21	1962	+ 0.42	- 0.84	- 2.07	12.47
CHATHAM 138	1962	+ 1.25	+ 1.14	- 0.04	24.50
DEDHAM 231	1965	+ 3.41	+ 0.02	+ 2.36	3.81
DOVER 10	1965	+ 0.79	+ 1.02	- 0.67	34.82
EAST BRIDGEWATER 30	1958	+ 8.82	+ 8.29	+ 1.80	7.45
FREETOWN 23	1964	+ 0.81	+ 0.94	- 0.58	14.10
GRANVILLE 5	1965	+ 0.13	- 0.35	- 0.43	34.49
GREAT BARRINGTON 2	1951	+ 0.16	+ 0.09	- 1.72	12.32
HAVERHILL 23	1960	+ 0.91	+ 1.07	- 0.01	12.62
LOWELL 14	1939	+ 2.18	+ 1.73	+ 0.90	13.46
MONTAGUE 5	1942	+ 0.13	+ 0.18	- 0.66	4.45
NORTHBOROUGH 38	1962	+ 0.23	+ 1.51	+ 0.35	4.55
NORTHBRIDGE 1	1965	+ 0.37	+ 0.60	+ 0.40	2.62
PITTSFIELD 51	1963	+ 3.55	+ 3.16	- 0.01	16.56
PLYMOUTH 22	1956	+ 0.93	+ 0.62	- 1.55	26.73
SANDWICH 252	1962	+ 0.22	+ 0.34	- 0.13	47.55
SANDWICH 253	1962	+ 0.33	- 0.45	- 1.52	52.00
STERLING 1	1947	- 0.02	+ 3.53	+ 1.33	3.05
TRURO 89	1962	+ 0.61	+ 0.48	+ 0.07	11.97
WELLFLEET 17	1962	+ 0.77	+ 0.84	- 0.38	11.35
WEST BROOKFIELD 10	1970	+ 1.48	+ 6.60	+ 2.60	3.17
WEYMOUTH 2	1965	+ 7.30	+ 13.19	+ 3.19	8.89
WILMINGTON 78	1951	+ 0.75	+ 1.26	+ 0.57	7.08
WINCHENDON 13	1939	- 0.89	+ 6.11	+ 2.21	4.31
WINCHESTER 14	1940	- 0.16	+ 3.36	+ 2.56	6.42
NEW HAMPSHIRE					
CONCORD 2	1963	+ 0.32	+ 0.15	- 1.58	41.44
CONCORD 3	1966	+ 0.19	+ 0.35	- 0.25	57.60
CONCORD 4	1966	+ 1.09	+ 3.37	+ 1.13	16.38
FRANKLIN 1	1966	+ 0.30	+ 4.90	+ 2.07	10.99 #
KEENE 2	1963	- 1.03	+ 0.68	+ 0.11	3.33
LEE 1	1953	+ 0.16	+ 0.46	+ 0.17	30.92
MERRIMACK 22	1958	- 0.11	+ 1.25	+ 0.76	8.39
MILFORD 36	1962	- 0.37	******	+ 0.85	7.50
NASHUA 218	1964	+ 0.36	- 0.13	+ 1.22	27.32
NEW LONDON 1	1947	- 0.69	+ 0.17	+ 2.19	7.27
WARNER 1	1965	+ 0.43	+ 2.01	+ 0.50	30.95
RHODE ISLAND					
BURRILLVILLE 187	1968	+ 1.81	+ 1.51	+ 0.05	15.47
CHARLESTOWN 18	1946	+ 3.44	+ 3.12	+ 0.72	17.77
CUMBERLAND 265	1946	+ 1.37	+ 2.55	+ 1.25	10.59
EXETER 16	1946	+ 3.87	+ 4.50	+ 3.27	8.77
PROVIDENCE 48	1944	+ 0.06	+ 1.23	+ 1.64	5.77
WEST GREENWICH 181	1969	+ 1.39	+ 1.84	+ 0.47	14.66
VERMONT					
BERKSHIRE 1	1966	- 0.87	- 0.56	- 0.29	13.71
BRIGHTON 1	1966	- 0.33	- 0.01	- 0.13	3.98
CHESTER 1	1966	- 0.11	+ 0.06	- 0.16	5.18
GLOVER 1	1966	- 0.19	- 0.29	- 0.28	17.37
HARTLAND 54	1969	+ 0.22	+ 0.57	+ 0.01	8.84
MILTON 3	1956	+ 0.22	+ 8.45	+ 5.46	28.51
MONTPELIER 2	1966	- 0.60	- 0.29	- 0.29	15.59
MORRISTOWN 1	1966	+ 0.18	- 0.55	+ 0.27	18.45
PITTSFORD 8	1957	+ 0.05	+ 2.03	+ 1.71	35.04
POWNAL 1	1964	+ 0.36	+ 0.60	+ 0.38	13.66
ROCHESTER 1	1966	- 1.74	+ 0.34	- 0.28	11.05
WEST FAIRLEE 1	1966	- 0.68	+ 1.16	+ 0.81	3.38

SET NEW HIGH OR EQUALED HIGHEST RECORDED WATER LEVEL FOR END OF DECEMBER
* - MONTHLY AVERAGE INCLUDES CURRENT MEASUREMENT
****** - DATA NOT AVAILABLE

A MONTHLY REPORT PREPARED BY THE
U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION
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IVAN C. JAMES II, DISTRICT CHIEF

IN COOPERATION WITH THE STATES OF
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